

Serial No.:10/015,351
Art Unit: 2132
Page 2

REMARKS

This is a full and timely response to the outstanding Office action mailed September 30, 2005. Claims 1-124 remain pending.

I. Present Status of Patent Application

Claims 1-124 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). These rejections are respectfully traversed.

II. Rejections Under 35 U.S.C. §102(b)

A. Claims 1-23

The Office Action rejects claims 1-23 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 1 recites:

1. A method for securely storing encrypted programming received at a receiver in a subscriber network, wherein the encrypted programming includes a plurality of ciphertext packets, the method comprising the steps of:

receiving from a headend of the subscriber network a first ciphertext packet at the receiver;

applying to the first ciphertext packet a first cryptographic algorithm to convert the first ciphertext packet to a second ciphertext packet; and

applying to the second ciphertext packet a second cryptographic algorithm to convert the second ciphertext packet to a third ciphertext packet.

(Emphasis added).

Serial No.:10/015,351
Art Unit: 2132
Page 3

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988).

Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying to the first ciphertext packet a first cryptographic algorithm to convert the first ciphertext packet to a second ciphertext packet**. “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” *See Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” *See Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 1, and the rejection should be withdrawn.

Because independent claim 1 is allowable over the cited references of record, dependent claims 2-23 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 2-23 contain all the steps/features of independent claim 1. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, since dependent claims 2-23 are patentable over *Pinder*, the rejection to claims 2-23 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 1, dependent claims 2-23 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 2-23 are allowable.

Serial No.:10/015,351

Art Unit: 2132

Page 4

B. Claims 24-37

The Office Action rejects claims 24-37 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 24 recites:

24. A method for securely providing in a subscriber network encrypted programming, which is received at a receiver at a subscriber location, the encrypted programming includes a plurality of ciphertext packets, and wherein the subscriber network includes a headend for distributing the encrypted programming and a plurality of receivers including the receiver at the subscriber location, at the headend the method comprising the steps of:

applying to a cleartext packet a first cryptographic algorithm to convert the
cleartext packet to a first ciphertext packet;

transmitting the first ciphertext packet to the receiver; and

at the receiver the method comprising the steps of:

receiving the first ciphertext packet;

***applying to the first ciphertext packet a second cryptographic algorithm to
convert the first ciphertext packet to a second ciphertext packet;*** and

applying to the second ciphertext packet a third cryptographic algorithm to
convert the second ciphertext packet to a third ciphertext packet.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 24 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying to the first ciphertext packet a second cryptographic algorithm to convert the first ciphertext packet to a second ciphertext packet**. "When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext." *See Specification*, page 2, lines 7-8. Therefore a ciphertext packet is

Serial No.:10/015,351

Art Unit: 2132

Page 5

an encrypted packet. *Pinder* discloses: "The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key." See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 24, and the rejection should be withdrawn.

Because independent claim 24 is allowable over the cited references of record, dependent claims 25-37 (which depend from independent claim 24) are allowable as a matter of law for at least the reason that dependent claims 25-37 contain all the steps/features of independent claim 24. Therefore, since dependent claims 25-37 are patentable over *Pinder*, the rejection to claims 25-37 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 24, dependent claims 25-37 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 25-37 are allowable.

C. Claims 38-54

The Office Action rejects claims 38-54 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 38 recites:

38. A receiver in a subscriber network that receives encrypted programming, from a headend of the subscriber network, wherein the encrypted programming includes a plurality of ciphertext packets, the receiver comprising:

an input port adapted to receive a first ciphertext packet of the encrypted programming;

a key generator adapted to generate a plurality of encryption keys; and

Serial No.: 10/015,351
Art Unit: 2132
Page 6

a cryptographic device in communication with the input port and the key generator, the cryptographic device adapted to apply a cryptographic algorithm at least twice *using at least one encryption key and the first ciphertext packet to convert the ciphertext packet to a second ciphertext packet.*

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. § 102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 38 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **using at least one encryption key and the first ciphertext packet to convert the ciphertext packet to a second ciphertext packet.** “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 38, and the rejection should be withdrawn.

Because independent claim 38 is allowable over the cited references of record, dependent claims 39-54 (which depend from independent claim 38) are allowable as a matter of law for at least the reason that dependent claims 39-54 contain all the steps/features of independent claim 38. Therefore, since dependent claims 39-54 are patentable over *Pinder*, the rejection to claims 39-54 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 38, dependent claims 39-54 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 39-54 are allowable.

Serial No.:10/015,351
Art Unit: 2132
Page 7

D. Claims 55-68

The Office Action rejects claims 55-68 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 55 recites:

55. A method for securely storing encrypted programming received at a receiver in a subscriber network, wherein the encrypted programming includes a plurality of ciphertext packets, the method comprising the steps of:

receiving a first ciphertext packet having multiple layers of encryption thereon at the receiver; and

applying an cryptographic algorithm to the first ciphertext packet to convert the first ciphertext packet to a second ciphertext packet.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 55 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying an cryptographic algorithm to the first ciphertext packet to convert the first ciphertext packet to a second ciphertext packet**. "When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext." See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: "The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key." See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 55, and the rejection should be withdrawn.

Serial No.:10/015,351

Art Unit: 2132

Page 8

Because independent claim 55 is allowable over the cited references of record, dependent claims 56-68 (which depend from independent claim 55) are allowable as a matter of law for at least the reason that dependent claims 56-68 contain all the steps/features of independent claim 55. Therefore, since dependent claims 56-68 are patentable over *Pinder*, the rejection to claims 56-68 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 55, dependent claims 56-68 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 56-68 are allowable.

E. Claims 69-76

The Office Action rejects claims 69-76 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 69 recites:

69. A method for providing a subscriber of a subscriber network with a program, the subscriber network including a headend with a plurality of receivers coupled thereto, at the headend the method comprising the steps of:

receiving a first ciphertext packet;

*applying an cryptographic algorithm with a key to the first ciphertext packet to
convert the first ciphertext packet to a second ciphertext packet;*

transmitting the second ciphertext packet; and

at the receiver the method comprising the steps of:

receiving the second ciphertext packet having multiple layers of encryption
hereon; and

applying a second cryptographic algorithm to the second ciphertext packet to
convert the second ciphertext packet to a third ciphertext packet.

(Emphasis added).

Serial No.:10/015,351
Art Unit: 2132
Page 9

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 69 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying an cryptographic algorithm with a key to the first ciphertext packet to convert the first ciphertext packet to a second ciphertext packet**. “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 69, and the rejection should be withdrawn.

Because independent claim 69 is allowable over the cited references of record, dependent claims 70-76 (which depend from independent claim 69) are allowable as a matter of law for at least the reason that dependent claims 70-76 contain all the steps/features of independent claim 69. Therefore, since dependent claims 70-76 are patentable over *Pinder*, the rejection to claims 70-76 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 69, dependent claims 70-76 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 70-76 are allowable.

F. Claims 77-82

The Office Action rejects claims 77-82 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Serial No.:10/015,351

Art Unit: 2132

Page 10

Independent claim 77 recites:

77. The method for securely providing a subscriber of a subscriber network with an encrypted program, wherein the encrypted program includes a plurality of ciphertext packets, the method comprising the steps of:

receiving a first ciphertext packet of the encrypted program;

applying a cryptographic algorithm with a key to the first ciphertext packet to convert the first ciphertext packet to a second ciphertext packet; and

transmitting the second ciphertext packet.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 77 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying a cryptographic algorithm with a key to the first ciphertext packet to convert the first ciphertext packet to a second ciphertext packet**. “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 77, and the rejection should be withdrawn.

Because independent claim 77 is allowable over the cited references of record, dependent claims 78-82 (which depend from independent claim 77) are allowable as a matter of law for at least the reason that dependent claims 78-82 contain all the steps/features of independent claim 77. Therefore, since dependent claims 78-82 are patentable over *Pinder*, the rejection to claims 78-82 should be withdrawn and the claims allowed.

Serial No.:10/015,351

Art Unit: 2132

Page 11

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 77, dependent claims 78-82 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 78-82 are allowable.

G. Claims 83-91

The Office Action rejects claims 83-91 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 83 recites:

83. A receiver in a subscriber network that receives encrypted programming from a headend of the subscriber network, wherein the encrypted programming includes a plurality of ciphertext packets, the receiver comprising:

- a port adapted to receive a first ciphertext packet of the encrypted programming, the first ciphertext packet corresponding to a cleartext packet having multiple layers of encryption thereon;
- a key generator adapted to generate an encryption key; and
- a cryptographic device in communication with the input port and the key generator, the cryptographic device adapted to apply a cryptographic algorithm *using the encryption key to the first ciphertext packet to convert the ciphertext packet to a second ciphertext packet.*

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 83 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **using the encryption key to the first ciphertext packet to convert the ciphertext packet to a second ciphertext packet.**

Serial No.:10/015,351
Art Unit: 2132
Page 12

"When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext." See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: "The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key." See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 83, and the rejection should be withdrawn.

Because independent claim 83 is allowable over the cited references of record, dependent claims 84-91 (which depend from independent claim 83) are allowable as a matter of law for at least the reason that dependent claims 84-91 contain all the steps/features of independent claim 83. Therefore, since dependent claims 84-91 are patentable over *Pinder*, the rejection to claims 84-91 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 83, dependent claims 84-91 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 84-91 are allowable.

H. Claims 92-99

The Office Action rejects claims 92-99 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 92 recites:

92. A method for securely storing encrypted programming received at a receiver in a subscriber television network, wherein the encrypted programming includes a plurality of ciphertext packets, the method comprising the steps of:

receiving from a headend of the subscriber network a first ciphertext packet at the receiver, wherein the first ciphertext packet has a single layer of

Serial No.:10/015,351

Art Unit: 2132

Page 13

encryption thereon that was applied by a first cryptographic algorithm using a first key;
generating a second and third key;
applying to the first ciphertext packet a second cryptographic algorithm with the second key to convert the first ciphertext packet to a second ciphertext packet having a second layer of encryption thereon; and
applying to the second ciphertext packet a third cryptographic algorithm with the third key to convert the second ciphertext packet to a third ciphertext packet having a third layer of encryption thereon.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 92 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least ***applying to the first ciphertext packet a second cryptographic algorithm with the second key to convert the first ciphertext packet to a second ciphertext packet having a second layer of encryption thereon.*** “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” *See Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” *See Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 92, and the rejection should be withdrawn.

Because independent claim 92 is allowable over the cited references of record, dependent claims 93-99 (which depend from independent claim 92) are allowable as a matter of law for at least the reason that dependent claims 93-99 contain all the steps/features of independent claim

Serial No.: 10/015,351
Art Unit: 2132
Page 14

92. Therefore, since dependent claims 93-99 are patentable over *Pinder*, the rejection to claims 93-99 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 92, dependent claims 93-99 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 93-99 are allowable.

I. Claims 100-104

The Office Action rejects claims 100-104 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 100 recites:

100. A receiver in a subscriber cable television network that receives encrypted programming, from a headend of the subscriber cable television network, wherein the encrypted programming includes a plurality of ciphertext packets, the receiver comprising:

- an input port adapted to receive a first ciphertext of the encrypted programming, wherein the first ciphertext packet has a single layer of encryption thereon that was applied by a first cryptographic algorithm using a first key;
- a key generator adapted to generate a plurality of keys including a second key and a third key;
- a cryptographic device in communication with the input port and the key generator, ***the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a second cryptographic algorithm and the second key and thereafter to convert the second ciphertext packet to a third ciphertext packet using a third cryptographic algorithm and the third key; and***
- a storage device in communication with the cryptographic device adapted to store the third ciphertext packet and the second and third keys.

Serial No.:10/015,351
Art Unit: 2132
Page 15

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 100 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a second cryptographic algorithm**. "When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext." *See Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: "The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key." *See Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 100, and the rejection should be withdrawn.

Because independent claim 100 is allowable over the cited references of record, dependent claims 101-104 (which depend from independent claim 100) are allowable as a matter of law for at least the reason that dependent claims 101-104 contain all the steps/features of independent claim 100. Therefore, since dependent claims 101-104 are patentable over *Pinder*, the rejection to claims 101-104 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 100, dependent claims 101-104 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 101-104 are allowable.

Serial No.:10/015,351

Art Unit: 2132

Page 16

J. Claims 105-109

The Office Action rejects claims 105-109 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 105 recites:

105. A method for securely storing encrypted programming received at a receiver in a subscriber television network, wherein the encrypted programming includes a plurality of ciphertext packets, the method comprising the steps of:

receiving from a headend of the subscriber network a first ciphertext packet at the receiver and a first key, a second key and a third key, wherein the first ciphertext packet has three layers of encryption thereon that were applied by a first cryptographic algorithm using the first key, the second key and the third key;

generating a fourth key;

applying to the first ciphertext packet a second cryptographic algorithm with the first key to convert the first ciphertext packet to a second ciphertext packet having two layers of encryption thereon; and

applying to the second ciphertext packet a third cryptographic algorithm with the fourth key to convert the second ciphertext packet to a third ciphertext packet having a third layer of encryption thereon.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 105 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying to the first ciphertext packet a second cryptographic algorithm with the first key to convert the first ciphertext packet to a second ciphertext packet having two layers of encryption thereon**. "When a

Serial No.:10/015,351
Art Unit: 2132
Page 17

function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext." See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: "The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key." See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 105, and the rejection should be withdrawn.

Because independent claim 105 is allowable over the cited references of record, dependent claims 106-109 (which depend from independent claim 105) are allowable as a matter of law for at least the reason that dependent claims 106-109 contain all the steps/features of independent claim 105. Therefore, since dependent claims 106-109 are patentable over *Pinder*, the rejection to claims 106-109 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 105, dependent claims 106-109 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 106-109 are allowable.

K. Claims 110-114

The Office Action rejects claims 110-114 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 110 recites:

110. A receiver in a subscriber cable television network that receives encrypted programming, from a headend of the subscriber cable television network, wherein the encrypted programming includes a plurality of ciphertext packets, the receiver comprising:

Serial No.:10/015,351

Art Unit: 2132

Page 18

an input port adapted to receive a first key, a second key, a third key and a first ciphertext of the encrypted programming, wherein the first ciphertext packet has three layers of encryption thereon that were applied by a first cryptographic algorithm using the first key, a second key and a third key; a key generator adapted to generate a fourth key; a cryptographic device in communication with the input port and the key generator, ***the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a second cryptographic algorithm*** and the first key and thereafter to convert the second ciphertext packet to a third ciphertext packet using a third cryptographic algorithm and the fourth key; and a storage device in communication with the cryptographic device adapted to store the third ciphertext packet and the second, third and fourth keys.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 110 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a second cryptographic algorithm**. “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 110, and the rejection should be withdrawn.

Serial No.:10/015,351
Art Unit: 2132
Page 19

Because independent claim 110 is allowable over the cited references of record, dependent claims 111-114 (which depend from independent claim 110) are allowable as a matter of law for at least the reason that dependent claims 111-114 contain all the steps/features of independent claim 110. Therefore, since dependent claims 111-114 are patentable over *Pinder*, the rejection to claims 111-114 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 110, dependent claims 111-114 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 111-114 are allowable.

L. Claims 115-119

The Office Action rejects claims 115-119 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 115 recites:

115. A method for securely storing encrypted programming received at a receiver in a subscriber television network, wherein the encrypted programming includes a plurality of ciphertext packets, the method comprising the steps of:

receiving from a headend of the subscriber network a first ciphertext packet at the receiver and a first key and a second key, wherein the first ciphertext packet has two layers of encryption thereon that were applied by a first cryptographic algorithm using the first key and a second cryptographic algorithm using the second key;

generating a third key; and

applying to the first ciphertext packet a third cryptographic algorithm with the third key to convert the first ciphertext packet to a second ciphertext packet having three layers of encryption thereon.

Serial No.:10/015,351
Art Unit: 2132
Page 20

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 115 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **applying to the first ciphertext packet a third cryptographic algorithm with the third key to convert the first ciphertext packet to a second ciphertext packet having three layers of encryption thereon**. “When a function ... is applied to cleartext ... using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 115, and the rejection should be withdrawn.

Because independent claim 115 is allowable over the cited references of record, dependent claims 116-119 (which depend from independent claim 115) are allowable as a matter of law for at least the reason that dependent claims 116-119 contain all the steps/features of independent claim 115. Therefore, since dependent claims 116-119 are patentable over *Pinder*, the rejection to claims 116-119 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 115, dependent claims 116-119 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 116-119 are allowable.

Serial No.:10/015,351
Art Unit: 2132
Page 21

M. Claims 120-124

The Office Action rejects claims 120-124 under 35 U.S.C. §102(b) as allegedly being anticipated by *Pinder, et al* (U.S. Patent No. 6,105,134). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 120 recites:

120. A receiver in a subscriber cable television network that receives encrypted programming, from a headend of the subscriber cable television network, wherein the encrypted programming includes a plurality of ciphertext packets, the receiver comprising:

- an input port adapted to receive a first key and a second key and a first ciphertext of the encrypted programming, wherein the first ciphertext packet has two layers of encryption thereon that were applied by a first cryptographic algorithm using the first key and a second cryptographic algorithm using the second key;
- a key generator adapted to generate a third key;
- a cryptographic device in communication with the input port and the key generator, ***the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a third cryptographic algorithm and the third key;*** and
- a storage device in communication with the cryptographic device adapted to store the third ciphertext packet and the first, second and third keys.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 120 is allowable for at least the reason that *Pinder* does not disclose, teach, or suggest at least **the cryptographic device adapted to convert the first ciphertext packet to a second ciphertext packet using a third cryptographic algorithm and the third key**. “When a function ... is applied to cleartext ...

Serial No.:10/015,351

Art Unit: 2132

Page 22

using a key ..., the cleartext is converted into ciphertext.” See *Specification*, page 2, lines 7-8. Therefore a ciphertext packet is an encrypted packet. *Pinder* discloses: “The 3DES encryption operation is a sequence of three DES operations: encryption using the first DES key, decryption using the second DES key, and encryption using the first DES key.” See *Pinder*, col. 13, lines 1-4. Even if, in *Pinder*, each packet is decrypted before it is encrypted in a subsequent stage, *Pinder* does not disclose, as in the instant claim, that an encrypted packet is encrypted again. Therefore, *Pinder* does not anticipate independent claim 120, and the rejection should be withdrawn.

Because independent claim 120 is allowable over the cited references of record, dependent claims 121-124 (which depend from independent claim 120) are allowable as a matter of law for at least the reason that dependent claims 121-124 contain all the steps/features of independent claim 120. Therefore, since dependent claims 121-124 are patentable over *Pinder*, the rejection to claims 121-124 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 120, dependent claims 121-124 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 121-124 are allowable.

III. Miscellaneous Issues

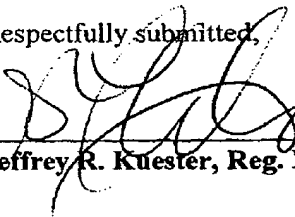
Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

Serial No.:10/015,351
Art Unit: 2132
Page 23

CONCLUSION

For at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-124 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



Jeffrey R. Kuester, Reg. No. 34,962

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500